### 201503US55XDIV

# IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

PREM S. PAUL ET AL.

SERIAL NO: NEW APPLN. : ATTN: APPLICATION BRANCH

FILED: HEREWITH

FOR: POLYNUCLEIC ACIDS ISOLATED
FROM A PORCINE REPRODUCTIVE
AND RESPIRATORY SYNDROME
VIRUS (PRRSV), PROTEINS ENCODED
BY THE POLYNUCLEIC ACIDS, VACCINES
BASED ON THE PROTEINS AND/OR
POLYNUCLEIC ACIDS, A METHOD OF
PROTECTING A PIG FROM A PRRSV AND
A METHOD OF DETECTING A PRRSV

## PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS

WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows/

### IN THE SPECIFICATION

Please amend the specification as shown in the marked-up copy following this amendment.

Please insert the following new paragraph beginning on page 1, line 6:

--The present application is a Divisional application of U.S. Serial No. 08/.301,435

filed September 1, 1994, which is a Continuation-In-Part of U.S. Serial No. 08/131,625 filed

October 5, 1997, which is a Continuation-In-Part of U.S. Serial No. 07/969,071 filed October 30, 1992 now abandoned.--.

Please replace the paragraph beginning on page 19, line 22, with the following text:

--Figures 3A, B and C shows a general schematic procedure for the construction of a cDNA \( \lambda \) library as described by the manufacturer (Stratagene);--.

Please replace the paragraph beginning on page 20, line 11, with the following text:

--Figures 7A and 7B shows the 2062-bp 3'-terminal sequence (SEQ ID NO:13) and the amino acid sequences encoded by ORF's 5, 6 and 7 (SEQ ID NOS:15. 17 and 19, respectively) of VR 2385;--.

Please replace the paragraph beginning on page 21, line 15, with the following text:

--Figures 17A, B, C and D compares the ORF 6 and ORF 7 nucleotide sequences of six U.S. PRRSV isolates and of LV, in which the VR 2385 nucleotide sequence is shown first, and in subsequent sequences, only those nucleotides which are different are indicated;--.

Please replace the paragraph beginning on page 22, line 1, with the following text:

Please replace the paragraph beginning on page 40, line 15, with the following text:

--Figures 20A and B shows the nucleotide sequence of a region of the genome of PRRSV isolate VR 2385 containing ORF's 2, 3 and 4;--.

--In the Experiments described hereinbelow, the isolation, cloning and sequencing of ORF's 2-7 of plaque-purified PRRSV isolate ISU-12 (deposited on October 30, 1992, in the American Type Culture Collection, 1080 University Blvd., Manassas, Virginia 20110-2209, U.S.A., under the accession numbers VR 2385 [3 x plaque-purified] and VR 2386 [non-plaque purified]) and ORF's 6-7 of PRRSV isolates ISU-22, ISU-55 and ISU-3927 (deposited on September 29, 1993, in the American Type Culture Collection under the accession

numbers VR 2429, VR 2430 and VR 2431, respectively), ISU-79 and ISU-1894 (deposited

on August 31, 1994, in the American Type Culture Collection under the accession numbers VR 2484 and VR 2475, respectively) are described in detail. However, the techniques used to isolate, clone and sequence these genes can be also applied to the isolation, cloning and sequencing of the genomic polynucleic acids of any PRRSV. Thus, the present invention is not limited to the specific sequences disclosed in the Experiments below.—.

Please replace the paragraph beginning on page 60, line 16, with the following text:

--In particular, the present biologically pure virus or infectious agent is an isolate of the Iowa strain or porcine reproductive and respiratory syndrome virus, samples of which have been deposited under the terms of the Budapest Treaty at the American Culture Collection, 10801 University Blvd., Manassas, Virginia 20110-2209, U.S.A., under the accession numbers VR 2385, VR 2386, VR 2428, VR 2429, VR 2430, VR 2431, VR 2484 and VR 2475.--.

### REMARKS

Claims 1-38 are active in the present application. The specification is amended for clarity, to match the formal drawings filed herewith and to update the depository information.

No new matter is believed to have been added by these amendments.

The paper copy of the Sequence Listing in this application found on pages 175-243, is identical to the computer readable Sequence Listing filed in application 08/301,435, filed September 1, 1994. In accordance with 37 CFR § 1.821 (e), please use the last-filed computer readable form filed in that application as the computer readable form for the instant application. It is understood that the Patent and Trademark Office will make the necessary change in application number and filing date for the instant application. A paper copy of the Sequence Listing is included in the originally-filed specification of the instant application.

An action on the merits and allowance of the claims is solicited.

Respectfully submitted,

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Marked-Up Copy Serial No:

Amendment Filed on:

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--[Figure 3] Figures 3A, B and C shows a general schematic procedure for the construction of a cDNA  $\lambda$  library as described by the manufacturer (Stratagene);--.

Please replace the paragraph beginning on page 20, line 11, with the following text:

--[Figure 7] Figures 7A and 7B shows the 2062-bp 3'-terminal sequence (SEQ ID NO:13) and the amino acid sequences encoded by ORF's 5, 6 and 7 (SEQ ID NOS:15. 17 and 19, respectively) of VR 2385;--.

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--[Figure 17] Figures 17A, B, C and D compares the ORF 6 and ORF 7 nucleotide sequences of six U.S. PRRSV isolates and of LV, in which the VR 2385 nucleotide sequence is

shown first, and in subsequent sequences, only those nucleotides which are different are indicated;--.

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